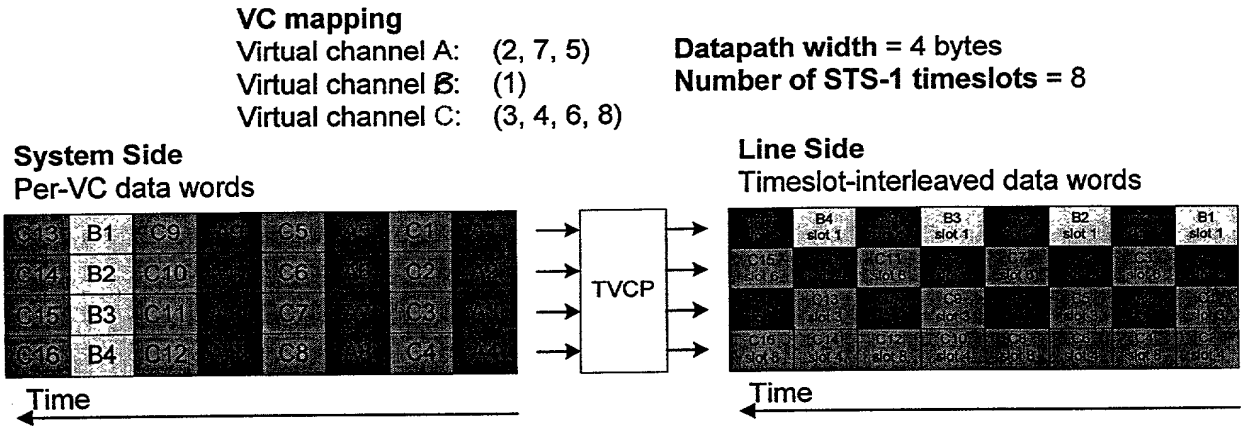


Figure 1: Example of virtual concatenation

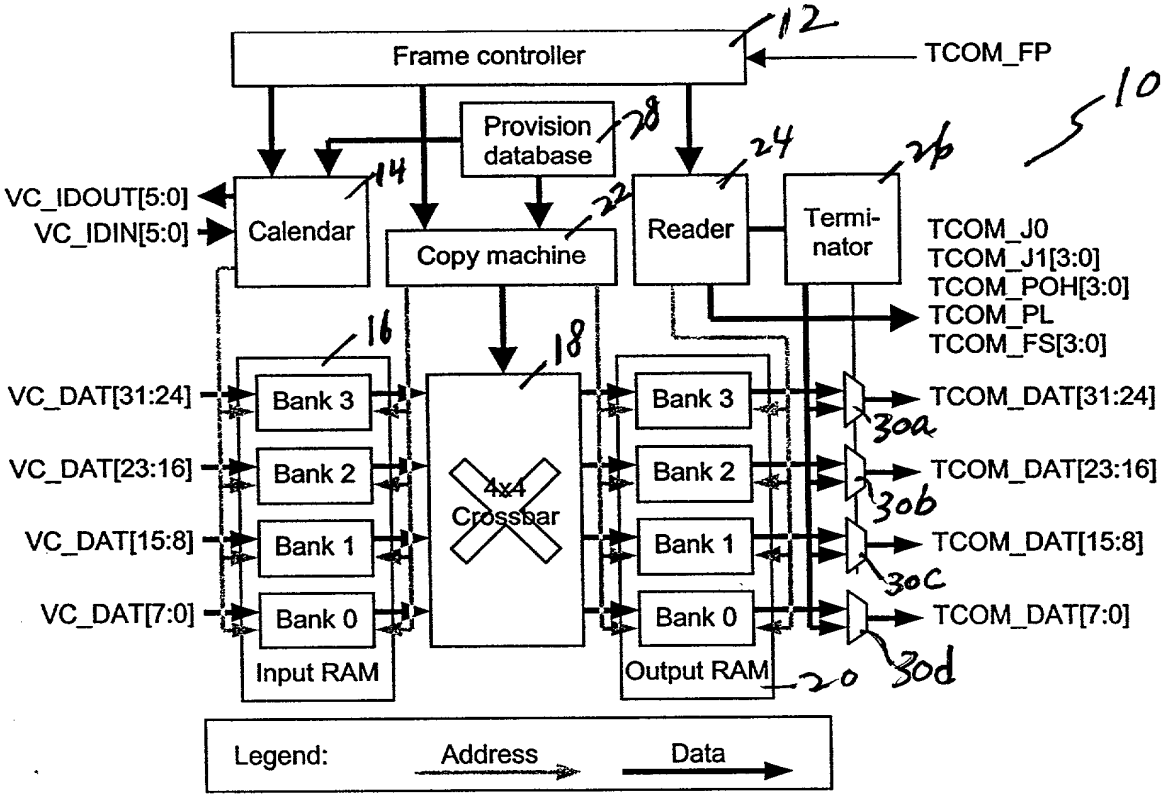


Figure 2: Block diagram of TVCP-48

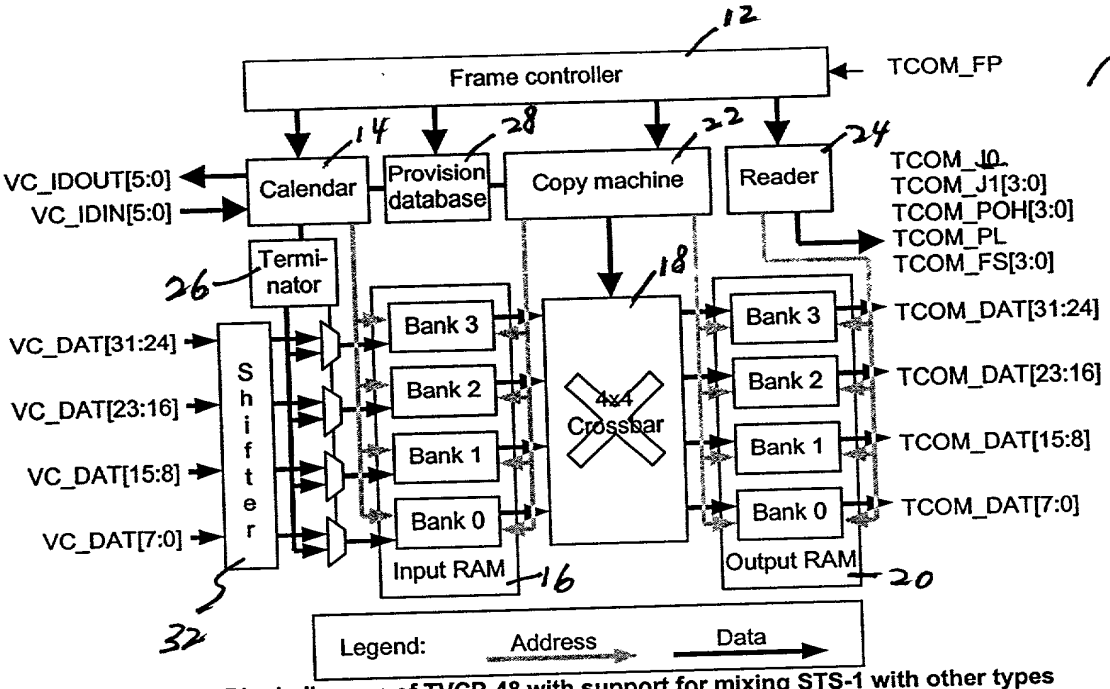


Figure 3: Block diagram of TVCP-48 with support for mixing STS-1 with other types

Fig. 4a

Example Channel Mapping

Channel	0	1		2		
Bandwidth	STS-1-1v	STS-1-2v		STS-1-3v		
Timeslot	4	1	5	3	0	2
Sequence Number	0	0	1	0	1	2

Fig. 4b

Example Calendar and Sequence Number Setting

Timeslot	0	1	2	3	4	5
Channel	1	2	0	1	2	2
Sequence Number	1	0	2	0	0	1

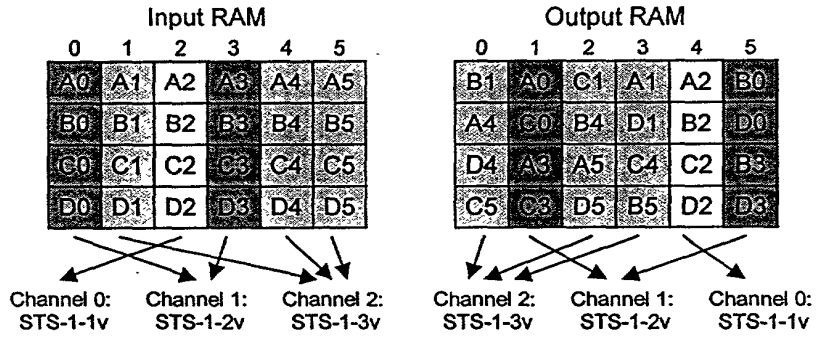
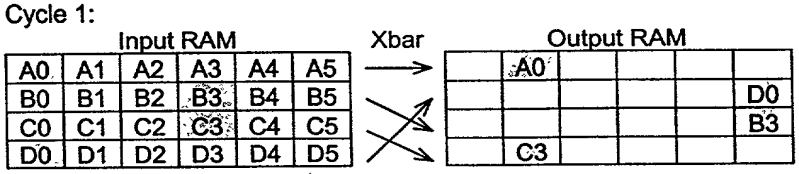
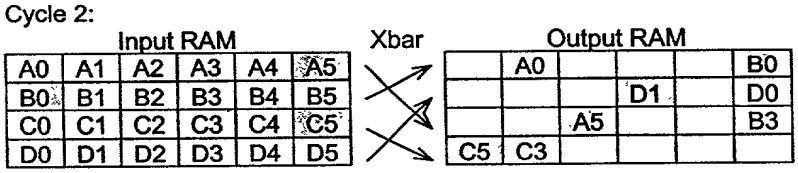


Fig 4C : **Footprint of Data Bytes in Input RAM and Output RAM**

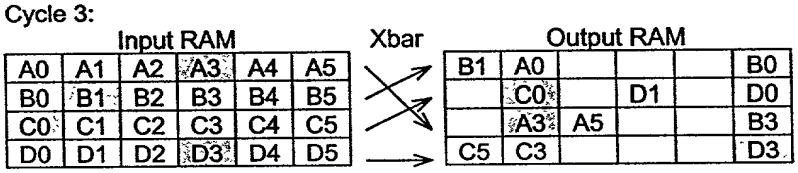
Cycle 1:



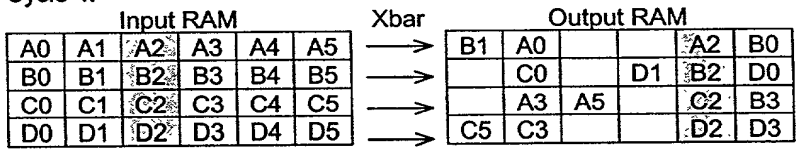
Cycle 2:



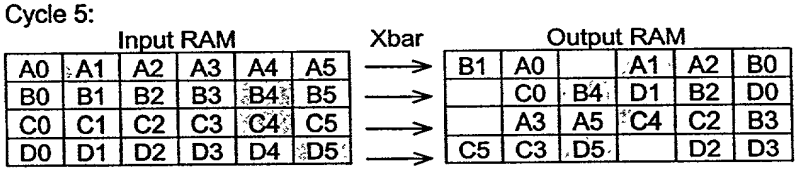
Cycle 3:



Cycle 4:



Cycle 5:



Cycle 6:

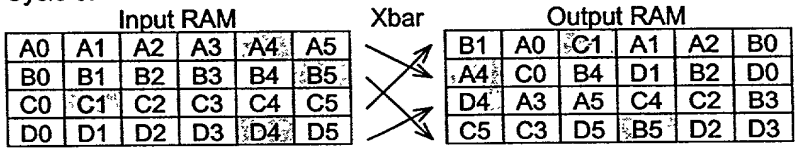


Figure 5. Data Movement from Input RAM to Output RAM

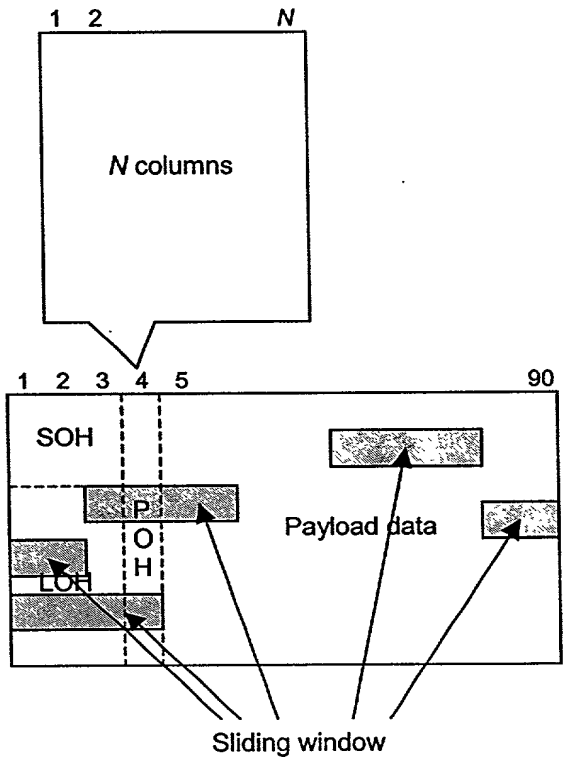


Figure 6 Sliding Window Across a SONET/SDH Frame

Fig. 7 **SPE Mapping of Different Traffic Types**

Timeslot	1	2	3	4	5	6	7	8	9	10	11	12	1	2	...
STS-1	POH1	POH2	POH3	POH4	POH5	POH6	POH7	POH8	POH9	POH10	POH11	POH12	D1	D2	...
STS-3c	POH1	POH2	POH3	POH4	D1	D2	D3	D4	D1	D2	D3	D4	D1	D2	...
STS-12c	POH	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
STS-24c	POH	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
STS-36c	POH	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
STS-48c	POH	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...
	FS	FS	FS	FS	D	D	D	D	D	D	D	D	D	D	...

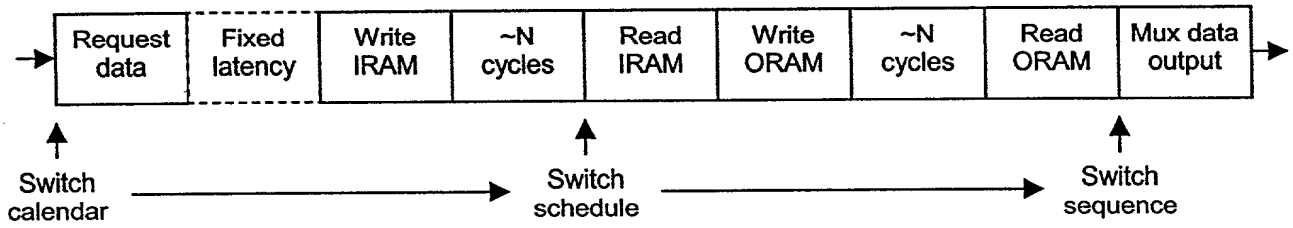


Fig. 8 : **Pipeline Stages of the TVCP Datapath**

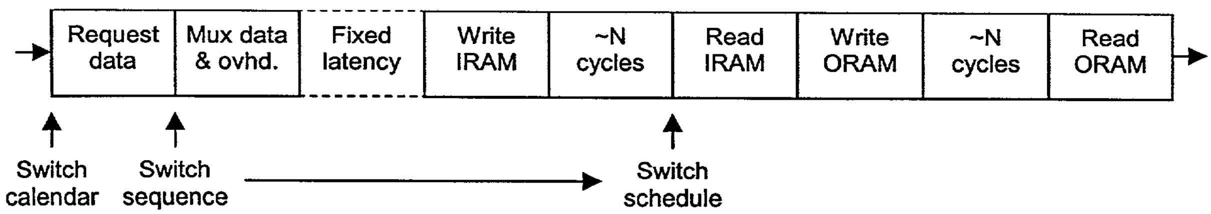


Figure 9. Pipeline Stages of the TVCP Datapath for Early Overhead Insertion

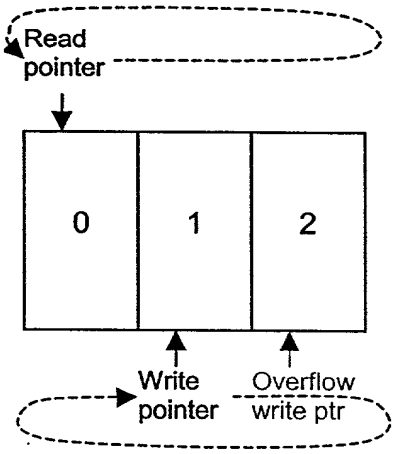


Fig. 10: Trip le Buffer in Input RAM